




OFFICE OF THE LEGISLATIVE AUDITOR  
STATE OF MINNESOTA • James Nobles, Legislative Auditor

Date: May 2, 2007

To: Members of the Legislative Commission  
on Pensions and Retirement

From: Jim Nobles  
Legislative Auditor 

Subject: Valuation of Assets in the Postretirement Fund

I understand that the Pension Commission may meet again before the current legislative session adjourns. If you do, I strongly urge you to implement the recommendation my office made earlier this year concerning the method used to value assets in the Postretirement Fund.

The current method of valuing assets equal to liabilities does not comply with generally accepted accounting principles. It also results in funding ratios for the statewide retirement plans that are misleading.

The solution to the problem is relatively simple: clarify *Minnesota Statutes* and change Pension Commission policy to require a "market-related" asset valuation method. I have enclosed a copy of the pages in the OLA report, *Postemployment Benefits for Public Employees*, where this issue and our recommendation are discussed.

Some people have connected a change in asset valuation for the Postretirement Fund with other issues and concerns. I think this approach is unnecessarily confusing and will likely delay needed action on the asset valuation issue.

The OLA report contains several other recommendations to help manage the deficit in the Postretirement Fund, but we recognize that they are more complex and will require more deliberation than you can accomplish this session. When you are ready to address those other issues, my staff and I would welcome an opportunity to discuss them with you. In the meantime—this session—I again request that you change the method used to value assets in the Postretirement Fund.

Thank you for your consideration.

Enclosure

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EVALUATION REPORT

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# Postemployment Benefits for Public Employees

pages 40-45

## FINANCIAL CONDITIONS OF STATEWIDE PENSION PLANS

We analyzed the financial condition of pension plans based on two key indicators. The first indicator is the funding ratio, that is, the ratio of assets to liabilities.<sup>2</sup> A funding ratio of 100 percent means that the fund is estimated to have enough assets to pay the liabilities already accrued as of the valuation date. The second indicator is whether current contribution levels—typically from employer and employees—are sufficient for the pension plan to reach fully-

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<sup>2</sup> Funding ratios are defined as actuarial assets as a percentage of actuarial accrued liability. Actuarial assets are obtained by recognizing changes in market value over a five-year period. To determine actuarial accrued liability, actuaries estimate future pension liabilities for each employee and divide that amount among the employee's expected years of service. Actuarial accrued liability is the liability attributable to employee service performed as of the specified date.

funded status by a target date designated in statute. An adequate contribution level means that the employer and employee contribution levels are sufficient to keep pace with liabilities that are being incurred each year, plus pay off any deficit by the target date. Both indicators are based on the principle that pension benefits ought to be funded during an employee's career rather than as benefit payments come due.

## Funding Ratios

We found that:

- **Based on currently reported funding ratios—the ratio of assets to liabilities—Minnesota's statewide public pension plans range from being well funded to having large deficits.**

As Table 3.2 shows, the July 1, 2006, funding ratios for the three major statewide pension plans ranged from a low of 75 percent for the Public Employees Retirement Plan administered by PERA to a high of 96 percent for the General State Employees Retirement Plan administered by MSRS. The Teachers Retirement Association Plan was almost fully funded as of July 1, 2005, (99 percent), but in 2006 TRA merged with the Minneapolis Teachers' Retirement Association, leaving the TRA plan with a funding ratio of about 92 percent.

**The PERA Public Employees Retirement Plan has a deficit of \$4.2 billion.**

The Public Employees Retirement Plan has a large deficit of \$4.2 billion because of insufficient contribution rates, changing demographics, and benefit improvements. Even though investment returns, on average, have met actuarial assumptions over the past 15 years, the fund still has a large deficit. After 1990, the plan's contribution rates have been deficient for 14 out of 16 years, meaning that employer and employee contribution rates have not been high enough to reach full funding by its target date, which is currently 2031.

Changing demographics and increasing benefits help explain the deficient contribution rates for the Public Employees Retirement Plan. For example, in 1997, actuaries found that the assumptions for employee turnover and mortality were too high, creating a bigger fund deficit than had been recognized. When employee turnover is lower than the assumed turnover rate, the deficit increases because employees who leave prior to retirement receive much lower benefits than employees who stay until retirement. Lower than expected mortality rates increase the deficit because the fund must pay benefits for a longer time period. To cover the resulting higher costs, the plan needed additional contributions of 2 percent of payroll. The Legislature did not raise contribution rates to address this problem until 2001, but even at that, the increase was still 1 percentage point short of what was necessary.

The Legislature increased retirement benefits for members of statewide retirement plans, including PERA during the 1980s and 1990s. The 1982 Legislature created the "Rule of 90" benefit for the PERA plan, under which employees whose age plus years of service equaled 90 or above could retire without the penalty that normally applies to employees who retire before age 65. The 1989 Legislature increased the retirement benefit for employees who retired

**Table 3.2: Financial Status of Minnesota's Statewide Pension Plans, July 1, 2006**

	Assets (millions)	Liabilities (millions)	Deficit (millions)	Funding Ratio
<b>Public Employees Retirement Association</b>				
Public Employees Retirement Plan	\$12,495	\$16,738	\$4,243	75%
Public Employees Police and Fire Plan	5,018	5,261	243	95
Local Government Correctional Employees Retirement Plan	126	133	8	94
<b>Teachers Retirement Association Plan</b>	19,036	20,679	1,643	92
<b>Minnesota State Retirement System</b>				
General State Employees Retirement Plan <sup>a</sup>	8,487	8,819	332	96
State Patrol Retirement Plan	619	641	22	96
Correctional Employees Retirement Plan	535	647	112	83
Judges Retirement Plan	152	202	50	75
Legislators Retirement Plan	49	81	33	60
Elective State Officers Retirement Plan	0.2	4	4	5
<b>Minnesota Postretirement Investment Fund<sup>b</sup></b>	22,050	26,089	4,039	85

NOTE: The Elective State Officers Plan and the Legislators Retirement Plan have unusually low funding ratios largely because they rely on pay-as-you-go funding.

<sup>a</sup> Figures for the General State Employees Retirement Plan include results for the Military Affairs Retirement Plan, the Transportation Department Pilots Retirement Plan, and the State Fire Marshal Division Arson Investigator Retirement Plan.

<sup>b</sup> The Minnesota Postretirement Investment Fund is not a pension plan. Its assets and liabilities are included in the actuarial valuations for the statewide pension plans administered by PERA, TRA, and MSRS. As we discuss in this chapter, however, the Postretirement Fund's deficit is not reflected in valuations for the pension plans.

SOURCES: Office of the Legislative Auditor, analysis of actuarial valuations for pension plans administered by: MSRS, PERA, TRA; <http://www.commissions.leg.state.mn.us/lcpr/valuations.htm>; Howard Bicker, State Board of Investment, interview, December 20, 2006.

at age 65 or older by up to 5 percent of employees' average salary.<sup>3</sup> In 1997, the Legislature increased the normal retirement benefit from 1.5 to 1.7 percent of an employee's "high-five" salary per year of service.<sup>4</sup>

<sup>3</sup> Prior to 1989, the normal retirement benefit equaled 1.0 percent of average "high-five" salary for each year of service for the first ten years plus 1.5 percent per year of service after the tenth year. In 1989, the Legislature adopted a two-tier benefit structure. Employees hired before July 1, 1989, could choose the existing benefit formula or a new formula. Employees hired on or after July 1, 1989, must use the new formula. Under the new formula, benefits were set at 1.5 percent per year of service for all years, an improvement over the old formula. If employees retired early under the new formula, however, they received larger penalties for retiring early than they received under the old formula. Employees who chose to retire under the rule of 90 had to use the old formula. Employees hired after July 1, 1989, could not use the rule of 90.

<sup>4</sup> Under the old formula, benefits were increased from 1.0 to 1.2 percent of the high-five salary for the first ten years of service.

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**Deficits in the  
PERA, MSRS,  
and TRA pension  
plans amounted  
to \$6.7 billion.**

Three of the four public safety plans had funding ratios over 90 percent as of July 1, 2006, including two administered by PERA, the Public Employees Police and Fire Retirement Plan and the Local Government Correctional Employees Retirement Plan, and the State Patrol Retirement Plan administered by MSRS. The MSRS Correctional Employees Retirement Plan's funding ratio dropped from 92 percent in 2005 to 83 percent in 2006 because of changes in mortality, employee turnover, disability incidence, and retirement rates.

Among the three smaller MSRS specialty plans, funding ratios were low because the state has used or is using a "pay-as-you-go" plan instead of prefunding the plans. The largest specialty plan, the judges plan, had a funding ratio of 75 percent as of July 1, 2006. Until 1973, it was largely a pay-as-you-go system, meaning that the state paid pension benefits as the annuities came due. Between 1973 and 1991, the plan was partially prefunded. The employees paid their share while they worked, but the state paid its share upon each judge's retirement.<sup>5</sup> In 1991, the state began prefunding the plan in the same way it does for the major statewide plans, that is, making regular contributions during the employees' careers. For the Legislators Retirement Plan, the state paid its share of the pension cost upon retirement until 2004, when it switched to pay-as-you-go funding. The Elective State Officers Plan also uses pay-as-you-go funding. While a sizeable portion of the liabilities for these specialty plans is not funded, the combined deficit in these plans is small compared with the unfunded liability in the much larger State Employees Retirement Plan.

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**These deficits do  
not include a  
\$4 billion deficit  
in the Postretire-  
ment Fund.**

The total unfunded liability—or deficit—reported for the statewide retirement plans was about \$6.7 billion, most of which was in the PERA Public Employees Retirement Plan for local government employees (\$4.2 billion). These deficits, however, only include deficits in the basic funds; they do not include the large deficit of the Postretirement Fund, which had a \$4 billion deficit as of July 1, 2006. This \$4 billion deficit is about 8 percent of the total liabilities of pension plans that participate in the Postretirement Fund. The Postretirement Fund's funding ratio was about 85 percent.

Benefit increases for Minnesota's Postretirement Investment Fund members (based in part on stock market gains in the 1990s), in combination with later stock market declines, created the fund's large deficit. The Postretirement Fund benefit formula, established in 1992, gives two types of benefit increases to retirees. The first is an inflation-based increase equal to the change in the consumer price index for wage earners (CPI-W) up to a maximum of 2.5 percent.<sup>6</sup> The second is based on investment gains that exceed the amount the fund must earn to pay the retirees' benefits, including the inflation-based increase. Typically, the threshold is 8.5 percent per year, but it is less if inflation is under 2.5 percent.<sup>7</sup> The formula smooths investment gains and losses over a five-year period. If the fund has a deficit, no investment-based increase can be given. During the 1990s, the Postretirement Fund built up large surpluses as

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<sup>5</sup> Beginning in 1973, employees (judges) made contributions to the retirement fund during their careers.

<sup>6</sup> In fiscal years 1993-1997, the postretirement benefit formula's inflation component had a cap of 3.5 percent. In FY 1998, it was reduced to 2.5 percent to partially offset the cost of increasing the normal retirement benefit from 1.5 to 1.7 percent of high-five average salary per year of service.

<sup>7</sup> The threshold equals 6 percent plus the inflation adjustment.

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**The legislatively-established formula to increase benefits after retirement is based on inflation and investment returns.**

investment earnings consistently exceeded the threshold of 8.5 percent. By 1999, it had an estimated surplus of \$4 billion. Because of the large investment earnings, the postretirement formula gave permanent annual benefit increases averaging 9.2 percent during 1996-2001. But when the stock market declined after 2000, benefits remained at the increased levels; in fact, they increased during this period because of adjustments due to inflation. As a result, the fund went from a \$4 billion surplus in 1999 to a \$5 billion deficit in 2003.

The funding ratios for each of the statewide retirement plans are based on the retirement plan's basic fund and the plan's portion of the Postretirement Fund. When we reviewed the method for calculating the funding ratios, we found that:

- **The funding ratios widely reported for the statewide retirement plans make the plans appear better funded than they really are.**

The funding ratio calculations do not properly value the Postretirement Fund's assets. Statement Number 25 of the Governmental Accounting Standards Board states that pension fund assets should be valued on the basis of a market-related value.<sup>8</sup> The calculations used by Minnesota's statewide pension plans, however, are based on the assumption that the Postretirement Fund is fully funded even though it really has a deficit estimated to be \$4 billion as of July 1, 2006. Normally, funding ratios equal assets divided by the liabilities. The funding ratio calculation used by Minnesota's statewide plans, however, puts the Postretirement Fund's liabilities in both the numerator and the denominator. Upon an employee's retirement, the assets put into the Postretirement Fund equals the estimated liabilities, but in subsequent years, the funding ratios do not recognize any changes in asset values due to unusually strong or weak investment returns.

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**However, no investment-based increase may be made to pension benefits as long as the Postretirement Fund has a deficit.**

The rationale for calculating the funding ratios in this way is to make them consistent with the way deficits are addressed in *Minnesota Statutes*. *Minnesota Statutes* address deficits in the Postretirement Fund in a different way than in basic retirement funds.<sup>9</sup> For basic retirement funds, deficits are to be remedied by increasing employer or employee contributions. *Minnesota Statutes* require actuaries to determine the amount of contributions necessary for the basic fund to be fully funded by a designated target date.<sup>10</sup> Statutes contain no such provision for the Postretirement Fund. Instead, deficits in the Postretirement Fund are restored only by achieving investment returns that exceed 8.5 percent and by retaining those excess earnings within the fund instead of giving investment-based benefit increases to retirees.

The problem with this rationale is that there is no mechanism in place to ensure that the Postretirement Fund will achieve or maintain full funding. It is misleading to characterize the Postretirement Fund as fully funded just because

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<sup>8</sup> Governmental Accounting Standards Board, *Statement No. 25 of the Governmental Accounting Standards Board, Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans* (Norwalk, CT: Governmental Accounting Standards Board, November 1994), Paragraphs 36-37.

<sup>9</sup> In addition, the Actuarial Standards for the Legislative Commission on Pensions and Retirement require actuaries to set the value of Postretirement Fund assets equal to the fund's liabilities.

<sup>10</sup> *Minnesota Statutes* 2006, 356.215, subd. 11.

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**Eliminating the deficit within 10 years will require the Postretirement Fund to earn an average of 11 percent annually.**

the Legislature intended the Postretirement Fund to be self correcting. Under current law, the only mechanism to protect the Postretirement Fund is a provision that the benefit formula not give investment-based increases when the fund has a deficit. This helps protect the fund from creating even larger deficits in the future, but does not ensure that the fund will reduce its existing deficit. Restoring the Postretirement Fund to full funding is problematic because the fund needs to earn an average return of more than 8.5 percent for an extended time period to eliminate the deficit. Actuaries for TRA estimated that to eliminate the Postretirement Fund deficit within ten years, the Postretirement Fund would have to earn at least 11 percent per year.<sup>11</sup> While this is possible, the director of the State Board of Investment and fund actuaries do not think it is likely. In fact, actuaries for the major statewide plans have proposed reducing the assumed rate of return for pension investments from 8.5 to 8.25 percent.

We think reporting the financial condition of retirement plans should be kept separate from how deficits are funded.

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## RECOMMENDATION

*To properly reflect actual financial conditions, the Legislature should require that funding ratios for the TRA, PERA, and MSRS retirement plans value Postretirement Fund assets on the basis of market-related values.*

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To accomplish this change, the Legislature should revise the statutes pertaining to how the Postretirement Fund's assets are valued in retirement plans' funding ratios. Furthermore, the Legislative Commission on Pensions and Retirement should change its actuarial standards to direct actuaries to value Postretirement Fund assets at market value. Changing the statewide retirement plans' valuations to reflect the Postretirement Fund deficit would make them consistent with governmental accounting standards. It would also reduce their current funding ratios. To estimate this effect for individual plans, we recalculated the July 1, 2006, funding ratios for the six largest statewide plans to include the Postretirement Fund deficit, as shown in Table 3.3. By reflecting the deficit, the statewide plans' 2006 funding ratios would decline from 6 to 10 percentage points. The overall funding ratio for Minnesota's statewide defined benefit plans would change from 87 to 80 percent.

## Sufficiency of Contributions to Pension Plans

As stated earlier in this chapter, the second indicator of a pension plan's financial condition is whether contributions from employees, employers, and other sources, if any, are sufficient for the pension plan to reach full funding by a target date designated in statute. If contributions are deficient, the pension plan's future contribution requirements will likely need to be higher to meet its target full-funding date. To determine whether contributions are sufficient, we examined

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<sup>11</sup> Letter from Buck Consultants, a consulting actuary for the Teachers Retirement Association, to Laurie Fiori Hacking, Executive Director of the Teachers Retirement Association, *Analysis of Post Fund Deficit*, April 11, 2006.